

**AMENDMENT TO THE CLAIMS:**

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (currently amended) Process for manufacturing a prosthetic joint with at least one loaded surface that consists at least partially of polyethylene, comprising:
  - (a) positionally restraining ~~compressing in a mould to a desired shape, between a hollow mould part and a plug,~~ one or more layers of a woven fabric of drawn gel-spun polyethylene fibres ~~at a pressure of at least 0.05 MPa and at a temperature between 120 and 165°C and below the crystalline melting point of the polyethylene at the prevailing temperature and pressure,~~ without a matrix material being present between a plug and a socket-shaped mould each of which is heated to an elevated temperature;
  - (b) tensioning the one or more layers of woven fabric positionally restrained between the plug and socket-shaped mould by initially advancing the plug into pressing contact with a surface of the woven fabric for a time sufficient to allow the one or more layers of woven fabric to attain the elevated temperature of the plug; and thereafter
  - (c) compressing the one or more layers of woven fabric by continued advancement of the plug to thereby forcibly press the one or more layers of woven fabric into the socket-shaped mould to attain a prevailing pressure of at least 0.05 MPa and temperature between 120 and 165°C and below the crystalline melting point of the polyethylene at the prevailing pressure and temperature, wherein, and  
at least the woven fabric in a layer situated on a loaded surface in contact with the plug comprises ~~comprising~~ at least 90 wt% of polyethylene fibres with a titre of at most 1000 denier.

2. (original) Process according to claim 1, wherein the woven fabric in a layer on a loaded surface is an i-over-j woven fabric of fibres with a titre t denier with an exposed fibre length on the surface of at most  $\sqrt{t/(250/\max(i,j))}$  cm.
3. (previously presented) Process according to claim 2, wherein the exposed fibre length on the surface is at most  $\sqrt{t/(330/\max(i,j))}$  cm.
4. (original) Process according to claim 3, wherein prior to compression the woven fabric is kept at a temperature of between 120 and 145°C for a period of between 1 and 30 minutes and under tension.
5. (previously presented) Process according to claim 1, wherein the polyethylene has an IV, measured in decalin at 135°C, of 4-40 dl/g.
6. (previously presented) Process according to claim 1, wherein at least the woven fabric in a layer situated on a loaded surface comprises at least 90 wt% of fibres that consist of monofilaments with a titre of at most 10 denier per filament.
7. (previously presented) Process according to claim 1, wherein at least the woven fabric situated in a layer on a loaded surface is a 1 x 1 plain weave fabric.
8. (previously presented) Process according to claim 1, wherein the woven fabric is a multi-layered woven fabric.
9. (previously presented) Process according to claim 1, wherein the woven fabric is a three-dimensional woven fabric.
10. (previously presented) Process according to claim 1, comprising bringing the woven fabric, under tension, to a temperature between 0 and 5°C below the temperature at which compression takes place, contacting the woven fabric brought to the required temperature with the hollow mould part under the pressure of the plug for a period of between 1 and 30 minutes, and compressing the woven fabric under a pressure of at least 0.05 MPa for a period of between 2 and 30 minutes.

11. (original) Process according to claim 10, wherein at least the woven fabric in the layer situated on a loaded surface has an exposed fibre length on the surface of at most  $\sqrt{t/(250/\max(i,j))}$  cm.
12. (previously presented) Process according to claim 10, wherein the prosthetic joint is a hip socket.
- 13.-16. (canceled)
17. (new) Process according to claim 1, wherein step (b) comprising clamping the one or more layers of woven fabric between a pressure element and a top edge of the socket-shaped mould.